AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. **(Currently Amended)** An optical system, comprising:

an optical filter configured to multiplex and/or demultiplex a first channel and a second channel based on a wavelength of each channel;

a first optical isolator ~~in optical communication~~optically coupled with ~~one side of the optical filter~~the first channel;

a second optical isolator ~~in optical communication~~optically coupled with [[an]]the ~~opposite side of the optical filter~~second channel; and

a light disposer in optical communication with the first optical isolator and arranged such that the light disposer and first optical isolator collectively define a portion of an optical path associated with ~~a signal from~~ the optical filter.

2. **(Original)** The system of claim 1, wherein the optical filter comprises an interference optical filter.

3. **(Original)** The system of claim 1, wherein the first and second optical isolators comprise a polarizing beam splitter and a quarter-wave plate.

4. **(Original)** The system of claim 1, wherein the first and second optical isolators comprise a device that imparts a non-normal incident angle to input light beams.

5. **(Original)** The system of claim 1, wherein the light disposer comprises a baffle or a conveyance.

6. **(Original)** The system of claim 5, wherein the conveyance is selected from the group consisting of mirrors, lenses, fibers, waveguides, rhombs, total internal reflectors, and combinations thereof.

7. **(Original)** The system of claim 1, wherein the system is configured as a multiplexer.

8. **(Original)** The system of claim 1, wherein the system is configured as a demultiplexer.

9. **(Currently Amended)** An optical system, comprising:

a means for filtering one or more wavelengths of optical energy based on the wavelengths of the one or more wavelengths of optical energy;

a first means for isolating one or more optical signal channels;

a second means for isolating one or more optical signal channels; and

a means for disposing of one or more optical signal channels received from the means for filtering by way of the first means for isolating

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10. **(Original)** The system of claim 9, wherein the system is configured as a multiplexer.

11. **(Original)** The system of claim 9, wherein the system is configured as a demultiplexer.

12. **(Canceled)**
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34. **(Canceled)**
35. **(Canceled)**
36. **(Canceled)**
37. **(Canceled)**

38. **(Previously Presented)** The system of claim 9, wherein the means for filtering is configured to:

receive even-parity optical signal channels through the first means for isolating; and

receive odd-parity optical signal channels through the second means for isolating.

39. **(Previously Presented)** The system of claim 38, wherein the means for filtering is further configured to:

transmit one or more of the even-parity optical signal channels to the second means for isolating; and

reflect one or more of the odd-parity optical signal channels back to the second means for isolating.

40. **(Previously Presented)** The system of claim 38, wherein the means for filtering is further configured to:

reflect one or more of the even-parity optical signal channels to the means for disposing through the first means for isolating; and

transmit one or more of the odd-parity optical signal channels to the means for disposing through the first means for isolating.

41. **(Previously Presented)** The optical system of claim 1, wherein the light disposer and first optical isolator are arranged such that a signal directed from the optical filter to the light disposer must pass through the first optical isolator.

42. **(Previously Presented)** An optical multiplexer system comprising:

a first optical isolator;

a second optical isolator;

a light disposer; and

an optical filter configured to:

receive even-parity and odd-parity optical channels from the first and second optical isolators, respectively;

transmit odd-parity optical energy and reflect even-parity optical energy to the light disposer by way of the first optical isolator; and

transmit even-parity optical energy and reflect odd-parity optical energy to the second optical isolator.

43. **(Previously Presented)** The system of claim 42, wherein the optical filter comprises an interference optical filter.

44. **(Previously Presented)** The system of claim 42, wherein each of the first and second optical isolators comprises a device that is configured to impart a non-normal incident angle to input light beams.

45. **(Previously Presented)** The system of claim 42, wherein the light disposer comprises a baffle or a conveyance.

46. **(Previously Presented)** The system of claim 45, wherein the conveyance comprises a mirror, lens, fiber, waveguide, rhomb, total internal reflector, or any combination thereof.

47. **(Previously Presented)** The system of claim 42, wherein one of the optical isolators comprises:

a polarizing beam splitter; and

a quarter wave plate.

48. **(New)** The optical system of claim 1, wherein:

the optical filter is configured to transmit a majority of energy of the first channel; and

the optical filter is further configured to reflect a majority of energy of the second channel.

49. **(New)** The optical system of claim 48, wherein:

the optical system is configured to direct a portion of the first channel reflected by the light filter to the light disposer; and

the optical system is configured to direct a portion of the second channel transmitted by the light filter to the light disposer.

50. **(New)** The optical system of claim 49, wherein the portion of the first channel reflected by the light filter and the portion of the second channel transmitted by the light filter are directed to the first optical isolator before the portion of the first channel reflected by the light filter and the portion of the second channel transmitted by the light filter are directed to the light disposer.

51. **(New)** The optical system of claim 48, wherein the majority of energy of the first channel transmitted by the optical filter and the majority of energy of the second channel reflected by the optical filter are multiplexed by the optical filter.

52. **(New)** The optical system of claim 48, wherein the majority of energy of the first channel transmitted by the optical filter and the majority of energy of the second channel reflected by the optical filter are demultiplexed by the optical filter.

53. **(New)** The optical system of claim 48, wherein the first channel includes even-parity optical signal channels and the second channel includes odd-parity optical signal channels.

54. **(New)** The optical system of claim 1, wherein the second optical isolator includes a multiplexed output, the first optical isolator includes an even input to receive the first channel, and the second optical isolator includes an odd input to receive the for the second channel.

55. **(New)** The optical system of claim 1, wherein the optical filter includes an odd input for receiving the second channel from the second optical isolator and an even input for receiving the first channel from the optical isolator.

56. **(New)** The optical system of claim 55, wherein the optical filter further includes:

an even transmitted output for transmitting a majority of the optical energy of the first channel transmitted by the optical filter; and

an odd reflected output for transmitting a majority of the optical energy of the second channel reflected by the optical filter.

57. **(New)** The optical system of claim 56, wherein the optical filter further includes:

an even reflected output for transmitting a portion of the optical energy of the first channel reflected by the optical filter; and

an odd transmitted output for transmitting a portion of the optical energy of the second channel transmitted by the optical filter.

58. **(New)** The optical system of claim 57, wherein the even transmitted output directs the majority of the optical energy of the first channel transmitted by the optical filter to a multiplexed output and the odd reflected output directs the majority of the optical energy of the second channel reflected by the optical filter to the multiplexed output.

59. **(New)** The optical system of claim 58, wherein the even transmitted output directs the majority of the optical energy of the first channel transmitted by the optical filter to a multiplexed output through the second optical isolator and the odd reflected output directs the majority of the optical energy of the second channel reflected by the optical filter to the multiplexed output through the second optical isolator.

60. **(New)** The optical system of claim 58, wherein the even reflected output directs the portion of the optical energy of the first channel reflected by the optical filter to the light disposer and the odd transmitted output directs the portion of the optical energy of the second channel transmitted by the optical filter to the light disposer.

61. **(New)** The optical system of claim 60, wherein the even reflected output directs the portion of the optical energy of the first channel reflected by the optical filter to the light disposer through the first optical isolator and the odd transmitted output directs the portion of the optical energy of the second channel transmitted by the optical filter to the light disposer through the first optical isolator.